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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,454	09/12/2003	Huy D. Phan	2024729-7032382002	7804

7590 06/17/2005

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EXAMINER

LEUBECKER, JOHN P

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,454

Applicant(s)

PHAN, HUY D.

Examiner

John P. Leubecker

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 13, 14, 16-25, 27, 29-35, 37-43, 44, 46 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Washizuka (U.S. Pat. 4,911,147).

Washizuka discloses a shaft (3) having a proximal end, distal end and a lumen (10, Fig.2) extending therebetween, the shaft housing an imaging window (13,16), an imaging cable (20), and a plurality of optical windows (11,12) mounted to the distal end of the shaft (Fig.2) with a plurality of optical cables (col.2, lines 43-45) fixedly secured to the shaft. The distal end of the shaft (4,5) can have a preshaped straight (rectilinear) or curved (curvilinear) geometry (note Figure 1 which shows the curved geometry). Furthermore, the circular cross-sectional shape of the shaft provides a curved geometry. Note tapered portion (between shaft and operating portion 2, best seen in Figure 1) fixedly mounted to the exterior of the proximal end of the shaft. This portion is ring shaped and coaxial with the shaft. The optical cables are connected to a light source (col.2, lines 36-39).

3. Claims 1, 4, 6, 7, 13-17, 20, 22, 23-27, 29, 32-37 and 41-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Flam (U.S. Pat. 5,607,386).

Referring mainly to Figures 7 and 8, Flam discloses a shaft (21) of a conventional fiberoptic bronchoscope (col.7, lines 37-39). Some of the element mentioned with respect to such are a light source, an illumination fiberoptic cable connected to the light source, at least one lumen, an imaging fiberoptic cable, an eyepiece (imaging device) and a bendable tip (col.7, lines 37-59). What is not mentioned is an objective optical system (which would anticipate the claimed imaging window). The Examiner takes the position that this is a necessary and required part of the imaging portion of a conventional fiberoptic bronchoscope and would therefore be inherent. Thus, the endoscope disclosed by Flam would meet the limitations of claim 1. The shaft is a wall and would fixedly house all components. The bendable tip allows the distal end of the shaft to be pre-shaped into a straight (rectilinear) or curved (curvilinear) shape. Furthermore, the circular cross-sectional shape of the shaft provides a curved geometry. In addition, use of the shaft with malleable wire (31) (Figs.7 and 8) allows for any pre-shaped shape. A stopper (33) is ring shaped, coaxial around the shaft (Fig.8) and, due to frictional engagement (col.9, lines 25-33), fixedly, yet slidably (when enough force is applied), secured to the exterior of the shaft. As to claim 29, the imaging window and imaging fiberoptic cable meet the limitations of an one optical window and one optical cable. As to claim 38, the imaging window and imaging fiberoptic cable meet the limitations of an one optical window and one optical cable and the eyepiece meets the "optical device".

4. Claims 1, 4, 6-10, 13, 14, 16, 17, 20, 22, 23-25, 27, 29, 32-35, 37, 38, 41, 42-44 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Greene (U.S. Pat. 5,327,881)

Greene discloses a shaft (14) having a proximal end, a distal end and a lumen (35, Fig.35) extending therebetween, the shaft housing an imaging window (20), an imaging cable (33) fixedly secured to the shaft and housed within the wall of the shaft. The distal end of the shaft can have a preshaped straight (rectilinear) (note Fig.1) or curved (curvilinear) geometry (via bending of flexible section 22 or malleable section 24). Furthermore, the circular cross-sectional shape of the shaft provides a curved geometry. Note stopper (26) fixedly mounted to the exterior of the proximal end of the shaft. This portion is ring shaped and coaxial with the shaft. The shaft has a diameter of 6.75 mm (col.6, lines 3-5) which is within the claimed range in claim 8 and is made from a semi-malleable material (col.3, lines 47-48). The distal end (flexible) is softer than the proximal end (semi-malleable).

5. Claims 1-7, 11-14, 16-25, 27, 29-35, 37-44 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Sidall et al. (U.S. Pat. 4,741,326).

Although Sidall et al. anticipates many of the claims, it is specifically being applied to meet claims 11 and 12. All other features can be easily found in the reference. Sidall et al. disclose a shaft (Fig.2) of an endoscope which has an imaging window, imaging cable, a plurality of optical windows and a plurality of optical cables (col.3, lines 24-41). The shaft also comprises a forceps channel (Fig.2) which includes a PTFE liner (5, Fig.2, col.2, lines 53-56).

6. Claims 17 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Green (U.S. Pat. 6,221,007).

Art Unit: 3739

Green discloses a shaft (190, Fig.8) having a lumen (255) configured to slidably house an instrument, an imaging window and imaging cable (note endoscope 400 which is described with respect to Figure 2 as incorporating a lens 65 and optical fiber bundle, col.7, lines 7-10) and an imaging device (CCD 300, Figure 14). Although other claims are anticipated by this reference, since they have been rejection multiple times above, they will not be mentioned.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

It is importantly pointed out that the references used above to reject the claims were selected so as to meet as many claims as possible, thereby eliminating redundancy by making rejections over the myriad references that meet the limitations of at least claim 1. Claim 1 is nothing more than a fiberoptic endoscope with a working channel. There are literally hundreds, if not thousands (if non-patent literature is included), of references that would meet the limitations of this claim. It appears to the Examiner that Applicant has not fulfilled the requirement to submit claims setting forth what is believed to be a patentable invention. Anyone skilled in the art, and the Examiner has to assume that Applicant is, would clearly know that the elements of at least claim 1 describe a conventional fiberoptic endoscope. In addition, for brevity, many rejections that could have been made under 35 U.S.C. 103(a) over a certain above mentioned reference were not made if the respective claims are anticipated by another reference. Thus, Applicant is strongly urged to amend the claims over the prior art of record, not just to minimally evade the applied references.

Therefore, the following references are being cited as only a sampling of relevant references until Applicant clearly sets forth the invention and provides a reasonable basis for which a search can be performed.

Bullard (U.S. Pat. 5,842,973)--teaches what a conventional fiberoptic bronchoscope may include--imaging optical fibers with distal lens, illumination optical fibers with distal lens, and working channel (col.5, lines 7-49). This reference would anticipate at least claims 1, 2, 4-8, 10, 13, 14 and 16 (and analogous claims within 17-47) and make obvious certain claims with respect to the Flam and Greene references regarding the illumination optical fibers and windows.

Soltesz et al. (U.S. Pat. 6,527,761)--teaches in Figure 3F a shaft with imaging optical fibers/lens, illumination optical fibers/lens and working channel (106) (col.9, lines 16-39) which can be made from polyethylene, polyimides, nylons PTFE (Teflon) and PEEK (col.8, lines 26-33); also suggests displaying the image on a CRT which implies use of a device such as a CCD.

Deem et al. (U.S. Pat. 6,694,979)--note Figures 7 and 8 and col.7, lines 42-62 which disclose many of the elements of Applicant's claims. This reference is also relevant to Flam which teaches use of a conventional bronchoscope.

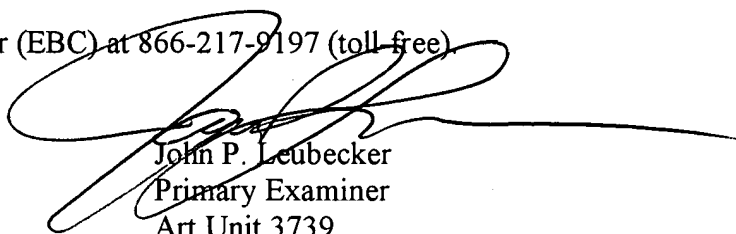
Ishibiki (2002/0010385)—Teflon working channel.

Arakawa et al. (U.S. Pat. 4,601,284)—use of CCD imaging device with optical fiber scope.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker
Primary Examiner
Art Unit 3739

jpl